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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,730	10/11/2001	Juha Telimaa	214910US6	6056
22850	7590	04/26/2004		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER GORDON, BRIAN R	
			ART UNIT 1743	PAPER NUMBER

DATE MAILED: 04/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/973,730

Applicant(s)

TELIMAA ET AL.

Examiner

Brian R. Gordon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10-11-01 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/7/03, 1/11/02
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "the calibration mechanism connected to the fine adjustment retainer" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Interpretations

3. Applicant's claims include reference numbers directed to elements of the invention, however the inclusion of the reference numerals does not limit applicant's claim to the elements. In order for those elements to be considered as elements of the claimed invention, applicant must specifically recite those limitations.

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The

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abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract includes claim language for example "comprising".

5. The disclosure is objected to because of the following informalities: On page 2, line 5 applicant's makes reference to the claims. However the claims are interpreted in light of the specification not vice versa.

On page 3, lines 24-31, applicant makes reference to the piston stroke ranges for example applicant "states the piston stroke changes 1-8 mm/revolution, such as 3-5 mm/revolution." It is unclear what is meant by the "such as" clause. Applicant discloses the broad range of 1-8; therefore it is unclear what is the purpose of disclosing the smaller range that is included within the larger range. Is it applicant's intent to express a preferable range?

It is unclear what is meant by "adjustment margin". Applicant does not specifically define the term. It is unclear what physical changes occur within the device in reference to the adjustment margin. The examiner understands that the unit mm/revolution means the distance of stroke changes 1 mm per revolution of the nut around the threading. However it is unclear what changes occur with 1-10 revolutions, typically 3-5 revolutions or 1/3-2 revolutions of the fine adjustment threading. How does the fine adjustment affect the stroke distance of the piston? Does one revolution of the

fine adjustment yield changes in tenths, one-hundredths, one-thousandths, or etc. of a mm?

The examiner fails to find support for claims 6, 7, 9, 10. The element 12 is not defined as an adjusting nut and is not disclosed as being in "a drilling".

Appropriate correction is required.

6. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim one defines an adjustable threaded retainer mechanism as collective comprising elements threading (5), rotatable nut (6), and top hindrance (8). The examiner fails to find support for such a claim. Page 4, lines 1-8 disclose:

"The retainer may comprise a threading made in the piston shaft and provided with a nut, the turning of which nut with respect to the pipette housing is prevented. However, said nut can move along with the piston in the direction of the piston's motion. The piston housing is provided with a hindrance corresponding to the nut, and said hindrance defines the other limit of the motion. In addition, the housing may be provided with a turnable hindrance corresponding to the nut, which hindrance defines the other limit of the motion. Preferably the other retainer is, however, realized by means of a second set of threading."

It appears that the threading and nut are defined as one retainer. The hindrance corresponding to the nut defines a second retainer, another third retainer may be provided in the form of a turnable hindrance corresponding to the nut, and a fourth

retainer is provided in the form of a second set of threading. The collective grouping of elements 5, 6, 8 are is not defined as a single retaining mechanism. Likewise where is support for elements retainer sleeve (10), fine adjustment sleeve (12) and inner sleeve (14) being defined collectively as a second adjustable threaded retainer? Likewise where is support for elements retainer sleeve (10) and flange (11) being collectively defined as "a calibration system"?

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It appears as if applicant is attempting to claim device comprise a first adjustable threaded retainer mechanism and a second adjustable threaded retainer mechanism each being comprised of different specific elements (see claim 1). The dependent claims are in a format in which it appears that either one of the two retainers may be further comprise the recited elements. For example claims 2 and 3 are drafted in a manner which neither one of the retainer are specifically further limited, but the claim provides for optionally limiting one of the two retainer mechanisms. This is not correct. Claim 2 states "there is an adjustable retainer mechanism of the upper limit...". Claim 1 makes references to two different retainer mechanisms. While the claim does include

reference to elements (5, 6, 8), the examiner suggests claim one be amended recite a first adjustable threaded retainer and subsequent dependent claims as well.

For example claim 2, wherein said first adjustable retainer mechanism is controls/establishes/limits the upper limit for motion of the piston and said second adjustable retainer mechanism is/controls/establishes/limits the lower limit for motion of the piston.

It is unclear how the second retainer may be limited as suggested by claim 3 when the claim is specifically directed to elements only defined as being included in the first retainer.

As to claim 3, it is unclear what element "it" refers to in line 3.

Claim 4, makes reference to "the retainer mechanism of the upper limit" there is no antecedent basis within claims 4 or 3 for such a limitation.

Claims 5 and 9 attempt to limit one of the two retainer mechanisms, however the claim is directed to an element already claimed as an element of the second retainer. Therefore, claim 5 is redundant and does not further limit the structure of claim 1.

Claim 6 and 10, makes reference to "the retainer mechanism of the lower limit" there is no antecedent basis within claims 10, 8, 6, 5, or 1 for such a limitation.

Claims 6, 7, 9, and 10, make reference to an adjusting nut (12), element 12 has not been defined as an adjusting nut only element 6 has been defined as "a nut".

As to claim 8, if element 10 has been established in claim 1 as being an element of the second adjustable threaded retainer mechanism it is unclear how it can

simultaneously be an element of the calibration system that is connected to the fine adjustment retainer.

Claim 8 makes reference to "the fine adjustment retainer" there is no antecedent basis within claims 8 or 1 for such a limitation. Claim 1 recites, "a fine adjustment threading".

Is the range adjustment threading of claims 11-14 the same as the threading 5 included in the adjustable threaded retainer mechanism of claim 1? If so, then why include element 5 in parenthesis in claim 1 and then repeat the inclusion of "a range adjustment threading". For the purpose of examination, the examiner interpreted element 5 and the range adjustment threading as one in the same.

Claim 1 states the fine adjustment threading has a pitch smaller than that of the range adjustment threading. Therefore it is unclear how both can have the same the range as indicated in claim 12.

As to claims 13-15, it is unclear what is meant by "adjustment margin". Applicant does not specifically define the term. It is unclear what physical changes occur within the device in reference to the adjustment margin. The examiner understands that the unit mm/revolution means the distance of stroke changes 1 mm per revolution of the nut around the threading. However it is unclear what changes occur with 1-10 revolutions, typically 3-5 revolutions or 1/3-2 revolutions of the fine adjustment threading. How does the fine adjustment affect the stroke distance of the piston? Does one revolution of the fine adjustment yield changes in tenths, one-hundredths, one-thousandths, or etc. of a

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mm? It is unclear what is the difference between the range in pitch of the threading and the adjusting margin.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Tervamaki et al. US 4,466,298.

Tervamaki et al. disclose a pipette which comprises a frame portion (1) shaped as a handle, a cylinder being formed inside the frame portion (1), as well as a piston (5) fitted into the cylinder by means of a seal ring (7), a piston rod (4) connected to the piston (3), as well as a press knob (5) with shaft (6), fitted at the upper end of the frame portion (1). Around the shaft (6) of the press knob (5), a calibration sleeve (9) is fitted by means of a threaded joint (8), by means of which calibration sleeve (9) the lower limit of the movement of the piston (3) during pipetting can be determined. According to the invention, the calibration sleeve (9), as surrounded by the mantle (10) of the hollow press knob (5) and by the upper part of the pipette frame (1), is placed at a distance both from the mantle (10) of the press knob (5) and from the inner face of the cover of the upper part of the pipette frame (1). Thereby the hollow press knob (5) and the pipette frame (1) form a cover protecting from conducted heat and allow a space of air around the adjustment and calibration sleeve (9) (abstract).

Specifically A sleeve 20 is fitted by means of a threaded joint 21 around the shaft 6 of the press knob. Inside the frame portion 1 of the pipette, there is an annular limiter flange 22, against whose lower face the sleeve 20 rests by means of its upper face. In this way, the sleeve 20 together with the annular flange 22 determines the upper position of the piston 3 (first adjustable threaded retainer mechanism including threading).

Above the adjustment thread 21 of the press knob shaft 6, on the press knob shaft 6 there is the calibration thread 8. The diameter and **the pitch** of the calibration thread 8 (second adjustable retainer mechanism) may **be either the same as or different from those of the adjustment thread 21 (including smaller or larger)**. By means of the calibration thread, a calibration sleeve 9 is fitted around the shaft 6 of the press knob 5, by means of which sleeve 9 the lower limit of the movement of the piston 3 during pipetting can be determined. As surrounded by the mantle 10 of the hollow press knob 5 and by the upper portion of the pipette frame 1, the calibration sleeve 9 is placed at a distance both from the mantle 10 of the press knob 5 and from the inner face of the cover of the upper part of the pipette frame 1. In such a case, the hollow press knob 5 and the pipette frame 1 constitute a protective cover against conducted heat and allow a sufficient air space around the adjustment and calibration sleeve 9. For the secondary movement of the pipette, an annular flange 11 is fitted in the annular space between the calibration sleeve 9 and the pipette frame 1, around the calibration sleeve 9, which annular flange 11 is pressed downwards against a limiter flange 14 placed at the lower portion of the calibration sleeve 9.

Conclusion


11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sabloewski, Horst, Al-Mahareeq, Kassab et al., Jarvimaki, Kari et al., Oppenlander, Jon E. et al., Tervamaki, Jukka (,604), Gilson, Warren E. et al., Gilson, Warren E., Heinonen, Mauno, MacDermott, Bruce R., MacDermott, Bruce R. et, al., Marteau D'Autry, Eric, Suovaniemi, Osmo A., and D'Autry, Eric M. disclose adjustable volume pipettes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

brg


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